

REMARKS

By this amendment, claims 1-4, 7-11, 14-18, 21-25, 28-32, 35-39, and 42 are pending, in which claims 5, 6, 12, 13, 19, 20, 26, 27, 33, 34, 40, and 41 have previously been canceled without prejudice or disclaimer, and no claims are withdrawn from consideration, currently amended, or newly presented. No new matter is introduced.

The Office Action mailed July 31, 2008 rejected claims 1-4, 7-11, 14-18, 21-25, 28-32, 35-39, and 42 as obvious under 35 U.S.C. § 103 based on *Kikuchi* (US 6,289,202) in view of *Kelly et al.* (US 2003/0050015).

Applicants respectfully traverse.

In accordance with MPEP §706.02(I)(2), Applicant asserts the following:

Application Serial No. 10/016845 (the instant application) and the U.S. Patent Publication to *Kelly et al.* (US 2003/0050015) were, at the time the invention of Application Serial No. 10/016845 was made, owned by Hughes Electronics Corporation.

The rejection of the claims under 35 U.S.C. § 103 is invalid because *Kelly et al.*, one of the applied references, is not prior art under 35 U.S.C. § 103(c), which states:

Subject matter developed by another person, which qualifies as prior art only under one or more subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Because the publication date (Mar. 13, 2003) of *Kelly et al.* is subsequent to the filing date of the instant application (Dec. 14, 2001), *Kelly et al.* would potentially qualify as prior art only under subsection (e) of section 102 (the filing date of *Kelly et al.* being Sep. 10, 2001, three months prior to the filing date of the instant application). Additionally, because the subject matter of *Kelly et al.* and the claimed invention were, at the time the invention was made, owned

by, and subject to an obligation of assignment to, Hughes Electronics Corporation, patentability of the instant claimed subject matter is not precluded by the *Kelly et al.* reference. Since there was common ownership **at the time the invention was made**, *Kelly et al.* does not qualify as prior art, and the rejection under 35 U.S.C. § 103 must be withdrawn.

Moreover, even assuming, *arguendo*, that *Kelly et al.* did qualify as prior art, in rejecting claims under 35 U.S.C. §103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See *In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teachings, suggestions, or implications in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), *cert. denied*, 488 U.S. 825 (1988); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the Applicant to overcome the *prima facie* case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See *Id.*; *In re Hedges*, 783 F.2d 1038, 1040, 228 USPQ 685, 687 (Fed. Cir. 1986); *In re Piasecki*, 745

F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 146-147 (CCPA 1976).

The Office Action has not met the Examiner's burden of presenting a *prima facie* case of obviousness. In particular, the Office Action cites *Kikuchi* for supporting two-way communication in a radio frequency communications system, for selecting a transmission channel class from a plurality of groups of channels in accordance with the radio environment, and transmitting a message according to the selected transmission channel class over a channel, and selectively modifying the transmission channel class based upon characteristics of the channel. The Office Action acknowledges the lack, in *Kikuchi*, of any teaching of ranging a satellite, the transmitted message being a ranging message, altering the transmission channel class for load balancing, and receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of the location of the satellite, and the characteristics of the channel, including power and timing information. For these deficiencies of *Kikuchi*, the Office Action relies on *Kelly et al.*, concluding that it would have been obvious to modify the communications network of *Kikuchi* with all of the above teachings of *Kelly et al.*, i.e., to provide the satellite communication system of *Kelly et al.* to *Kikuchi's* method of selecting channels because this "provides a communication system in which the channel selector can function as designed" (Office Action, page 5).

Respectfully, the articulated rationale for the combination is so devoid of any rational underpinning that the conclusion of obviousness can only have been reached through impermissible hindsight using Applicants' disclosure and claims as a blueprint for making the combination. From the very language of the rejection rationale, the Office Action is simply picking and choosing certain features of these references to construct the instant claimed subject matter.

As an initial matter, the references to *Kikuchi* and *Kelly et al.* do not even constitute analogous art. *Kikuchi* relates to selection of a channel based on radio characteristics, whereas *Kelly et al.* relates to measuring install-time of an installed antenna signal for the purpose of selectively adjusting antenna position in a satellite system.

The test for analogous art outside an inventor's field of endeavor is whether the art pertains to the particular problem confronting the inventor. *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

The inventor's field of endeavor in the instant case is two-way communication via satellite and, in particular, ranging in a radio frequency communication system that includes a satellite configured to support two-way communication. As acknowledged in the Office Action, *Kikuchi*, in no way, relates to satellites or to two-way communication involving satellites. While the reference does relate to radio communication, the artisan seeking methods and apparatus related to ranging in a radio frequency communication system that includes a satellite configured to support two-way communication would not have looked to *Kikuchi* for anything since *Kikuchi* is not within the inventors' field of endeavor (two-way communication involving satellites). *Kikuchi* does not pertain to the particular problem confronting the inventors, viz., providing access to the Internet over a satellite communications system by providing two-way satellite communication while eliminating use of a terrestrial link. This is achieved by the instant claims in selecting a transmission channel class, transmitting a ranging message according to the selected channel class, modifying the channel class in accordance with the characteristics of the channel, and receiving a request to perform re-ranging. Since *Kikuchi* merely selects a channel from groups of channels based on a radio environment, and changes a stored channel group based on a measurement message, but does not relate to satellite communication or the problem of providing access to the Internet over a satellite communications system by providing

two-way satellite communication while eliminating use of a terrestrial link, *Kikuchi* cannot be considered analogous art. Accordingly, the proposed combination of *Kikuchi* and *Kelly et al.* is improper.

Even if the applied references disclosed everything alleged by the Office Action, which they do not, the claimed subject matter would not have been suggested by these references. For example, in claim 1, even if *Kikuchi* disclosed “selecting a transmission channel class,” as alleged in the Office Action, and even if *Kelly et al.* disclosed “transmitting a ranging message,” as alleged in the Office Action, the existence of these two teachings, *per se*, would not teach or suggest “selecting a transmission channel class,” and then “transmitting a ranging message **according to the selected transmission channel class over a channel,**” as further recited in the claim. That is, one cannot merely pick and choose various features of the claimed subject matter from the prior art while ignoring the specific interrelationships and functionalities of those claimed features. Thus, the claim requires that the transmitting of a ranging message be **“according to the selected transmission channel class over a channel.”** There is absolutely no suggestion within the applied references, or anywhere else, that there is any such relationship between any selection of a transmission channel class, as alleged to be taught by *Kikuchi*, and the transmission of a ranging message, as alleged to be taught by *Kelly et al.* Independent claims 8, 15, 22, 29, and 36 contain similar features.

While *Kelly et al.* does relate to satellites, the reference is directed to automatic signal measurement in the satellite communication system with the measurement being employed for the purpose of accurately pointing an antenna. Thus, there would have been nothing to be gained by attempting to combine such a disclosure with a system for selecting channels based on radio characteristics.

With regard to claim 7, for example, and, contrary to the Office Action, there is no disclosure in *Kelly et al.* suggestive of “altering the transmission channel class for load balancing,” as claimed. Since even the Office Action admits that *Kelly et al.* does not disclose “selecting a transmission channel class,” (relying on *Kikuchi* for this teaching at the top of page 3 of the Office Action), it stands to reason that *Kelly et al.* also cannot disclose the altering of that which it does not disclose, i.e., a transmission channel class. The Office Action refers to paragraph [0075] of the reference for ranging to adjust timing as needed for load balancing (Office Action-page 4). However, the disclosed “ranging,” whereby sites are configured and timing of the Network Control Cluster (NCC) is adjusted at the cited portion of *Kelly et al.*, has no relevance to “altering **the transmission channel class** for load balancing,” as recited in claim 7, for example. Again, the fact that *Kelly et al.* is devoid of such a teaching is to be expected since *Kelly et al.* discloses no “selecting a transmission channel class,” as claimed. Dependent claims 14, 21, 28, 35, and 42 contain similar features.

Even if the applied references disclosed all that the Office Action alleges, which they do not for the reasons above, the combination is nothing short of a forced-fit with no basis in fact for doing so. Other than impermissible hindsight, what possible motive could there be for taking a system for accurately positioning an antenna and forcibly imposing this system on a system for selecting a channel based on radio characteristics? Simply put, there is no possible motive, within the meaning of 35 U.S.C. § 103, and nothing within, or without, the references, other than impermissible hindsight, would have led the artisan to make such a combination in order to reach the instant claimed subject matter. Certainly, the very generalized motive offered by the Office Action, i.e., “it provides a communication system in which **the channel selector can function as designed**” (Office Action-page 5), provides no meaningful basis, as it is unclear what is intended by “function as designed,” for concluding obviousness.

Accordingly, the Examiner is respectfully requested to withdraw the rejection of claims 1-4, 7-11, 14-18, 21-25, 28-32, 35-39, and 42 as obvious under 35 U.S.C. § 103.

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 519-9952 so that such issues may be resolved as expeditiously as possible.

To the extent necessary, a petition for an extension of time under 37 C.F.R. §1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

DITTHAVONG MORI & STEINER, P.C.

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Date

/Phouphanomketh Ditthavong/
Phouphanomketh Ditthavong
Attorney/Agent for Applicant(s)
Reg. No. 44658

Errol A. Krass
Attorney/Agent for Applicant(s)
Reg. No. 60090

918 Prince Street
Alexandria, VA 22314
Tel. (703) 519-9952
Fax. (703) 519-9958